REMARKS

This is in response to the Office Action mailed on February 8, 2007.

Claims 1, 3, 9, 10, 11, 13, 18, and 19 are amended, and no claims are cancelled or added; as a result, claims 1-21 remain pending in this application.

§112 Rejection of the Claims

Claims 3, 4, 9, 10, 13 and 18 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 3, 9, 10, 13, and 18 were amended to correct typographical antecedent basis problems.

Claim 4 was not amended, as the phrase "the group consisting of" is the suggested Markush claim format (see, e.g., MPEP §803.02).

§101 Rejection of the Claims

Claims 1-21 were rejected under 35 USC § 101 because the claimed inventions are directed to non-statutory subject matter.

Applicant notes that a concrete, useful and tangible result is obtained in the currently pending claims, consistent with MPEP 2106 (IV) (B) (2) (2). As noted in the MPEP, a physical transformation is not required where a final result is "useful, tangible, and concrete". As the pending claims recite "derive(ing) a component specific model" as a result, which has industrial value, a useful result is obtained. Similarly, a tangible and concrete result is obtained, as the process produces substantially the same model when the same process is applied, and is repeatable.

As described more fully in the specification, some embodiments of the invention are useful in that they enable models to be developed more quickly, more accurately, and more consistently than prior art methods. The model that results need not be displayed to a user or applied to a physical production plant to be useful, concrete, and tangible, as it has practical application and significant value for other applications such as modeling a process, scheduling, and other such applications.

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Note particularly that a history of case law has indicated useful, tangible, and concrete results are obtained without physical output, such as a method of controlling parallel processors to accomplish multitasking (*In re Bernhart*, 417 F.2d 1395, 1400), a computerized method of optimally controlling transfer of data between cache and a hard disk drive to improve cache efficiency, and a digital filtering process to remove noise from a digital signal (statutory examples given in MPEP v8r4 at 2106 (IV) (B) (2) (b) (ii)).

Further, the pending claims do not explicitly recite a mathematical algorithm, or preempt use of a specific mathematical algorithm in areas other than the context of the claimed invention (e.g. other than applying assumptions to a symbolic generic model to derive a component specific model reflecting the assumptions), making the claims statutory under *In re Deutsch*, 553 F.2d 689 (C.C.P.A. 1977).

Nevertheless, applicant has amended the claims to store the resulting model in a computer-readable medium, producing a physical result – a model that is more clearly statutory as it produces both a concrete, useful, and tangible result in the model itself and includes a physical element in that a physical representation of the model is produced that can be used for modeling, process control, ordering, scheduling, or other such practical applications. Note computer-readable mediums and storage of models are supported such as by previously pending claim 19; p.4, ln. 25-30; p. 8, ln. 3-4; p. 8, ln. 25 – p. 9, ln. 10.

Applicant therefore requests reexamination and allowance of the pending claims 1-21.

Reservation of Rights

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

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assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

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Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 349-9581 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

VIPIN GOPAL ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938

Minneapolis, MN 55402

(612) 373-6972

Date May 807

John M. Dahl

Reg. No. 44,639

Name

Signature